To: DIRECTORS, DEPUTY DIRECTORS, AND BUREAU CHIEFS

From: Dianna L. Taylor

Bureau Chief of Personnel Management

Subject: Technical Vacancy/*RECRUITMENT* 

Date: February 17, 2016

Attached are the Position Summary Sheet and Position Description for the vacant technical position listed below. Please post this vacancy announcement February 18, 2016 in the designated areas.

The deadline for applicants to submit their names for consideration is **4:30 p.m.** on **Wednesday, March 2, 2016**. Applicants will not be accepted after that time and date.

NOTE: Official college transcripts must be included with application. Applicants possessing an Engineer Intern License must also include a copy with application. Applicants not submitting these documents by the posting deadline will not be considered for employment. Please include IPR number on the application.

All applicants will receive a position description for the position they are applying for. If you have any questions, please contact Denise Hamilton or Jennifer Sunderland at 217/782-5594.

CET (3 pos) Studies & Plans Squad Member Trainee

Region 4/District 6/Program Development

Highways Springfield

Attachments 40765

Technical Applications (PM 1080) <u>must be received</u> by the Bureau of Personnel Management, Room 113, 2300 South Dirksen Parkway, Springfield, IL 62764 (Fax# 217/557-3134) by **Wednesday, March 2, 2016**, 4:30 p.m. Please include address, daytime phone and position for which applying if not already listed on application. Applicants will be notified in writing to schedule interviews.

NOTE: Official college transcripts must be included with application. Applicants possessing an Engineer Intern License must also include a copy with application. Applicants not submitting these documents by the posting deadline will not be considered for employment. Please include IPR number on the application.



**Position Summary Sheet** 

An Equal Opportunity Employer

Classification: Civil Engineer Trainee (3 positions)/ RECRUITMENT Salary Range: \$4,275 - \$4,655

Position Title: Studies & Plans Squad Member Trainee Union Position: 🖂 Yes 🗌 No

Position Number: PW110-23-56-303-40-01 IPR#: 40765

#### Office/Central Bureau/District/Work Address:

Division of Highways/Region 4/District 6/Bureau of Program Development, 126 E Ash St, Springfield, IL

## **Description Of Duties:**

This is an entry-level, trainee position responsible for performing detailed tasks associated with the preparation of design studies, contract plans, and specifications for highway improvement projects.

### **Special Qualifications:**

## The following criteria is required:

- Bachelor of Science in Civil Engineering from an ABET accredited university prior to date of employment or must be a Licensed Engineer Intern in the State of Illinois (includes those expecting to graduate in Spring 2016)
- Minimum 2.5 cumulative GPA in engineering related courses (If GPA is between a 2.0-2.5, candidate must have passed Fundamentals of Engineering Exam.)
- Official college transcripts must be included with application. (Official transcripts indicating graduation date for Spring 2016 graduates must be provided at time of hire.)
- Valid driver's license

## The following criteria is desired:

Strong oral and written communication skills

### Shift/Remarks:

8:00 am - 4:30 pm / Monday - Friday

\*THIS IS AN ENTRY-LEVEL POSITION THAT IS PART OF A ROTATION PROGRAM\*

# ILLINOIS DEPARTMENT OF TRANSPORTATION POSITION DESCRIPTION

**DATE:** December 2015 **POSITION:** Studies & Plans Squad Member

Trainee

**APPROVED BY:** OFFICE/DIVISION: Division of Highways/District 6

Roger Driskell

Program Development

CODE: PW110-23-56-303-40-01 REPORTS TO: Plan Project Squad Engineer

# **Position Purpose**

This position is accountable for performing detailed tasks associated with the preparation of design studies, contract plans, and specifications for highway improvement projects.

### **Dimensions**

Project Studies: 2-3 annually Contract Plans: 2-6 annually

Cost of Projects: \$50,000 to \$60,000,000 in contract value

Public Meetings: 1-2 annually

# Nature and Scope

This position reports to the Plan Project Squad Engineer as do the Studies and Plans Engineers II and Studies and Plans Engineers I. There are no subordinates to this position.

The position will be enrolled in a rotation program and will be assigned to various sections or bureaus in the District. These responsibilities may involve performing various assigned duties within the sections of Programming, Studies and Plans, Project Support, Land Acquisition, Constructions, Materials, Local Roads, Maintenance, Bridges, and Traffic. Upon completion of the rotation program, the District will work with the incumbent to determine a permanent bureau assignment, which will also take into account bureau needs and their staffing levels.

The incumbent is a member of an interdisciplinary study team which is responsible for highway projects from initial planning work through preparation of contract plans and specifications. This function primarily involves tasks assigned by the Squad Leader which may involve review of alternate corridors and alignments for both new highway systems and the reconstruction of existing facilities, and the preparation of contract plans. Contract plans and the special provisions must be accurate, complete, in accordance with design policy and predetermined schedules, and be done in such a manner that the plans and special provisions are clear in construction phasing and sequence to help contractors in preparing bids. The proposed design plans must be coordinated with other agencies so that completed plans may be ready for letting according to schedule.

Typical problems encountered by the incumbent include developing the parameters for the project studies that need to be made, determining what data is available, developing feasible alternates, resolving technical and procedural problems, developing hydraulic design of culverts and ditches, staging construction work to provide adequate working room for the contractor and to insure convenience and safety for the traveling public, and coordinating the proposed design with the needs of other agencies. The incumbent's greatest challenge is to provide the most cost effective design for the proposed transportation facility within the allotted time frames while weighing engineering design factors along with various social, economic, safety, and environmental factors.

Functions personally performed by the incumbent include gathering data for project studies and reports; determining design alternatives; evaluating adequacy, right-of-way requirements, costs, and environmental factors; preparing design reports which document the project study; determining grade lines; conducting

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# Studies and Plans Squad Member Trainee Highways/ District 6 Page 2

drainage analysis for storm sewer design; developing special design details; preparing and checking earth work computations; and calculating quantities for all pay items.

The incumbent must perform his/her duties in accordance with the guidelines of the AASHTO Design Manual, the IDOT Policy and Procedural Manual, and design policies and procedures. This position evaluates alternatives, including solving problems not covered under policies, and makes recommendations to the Squad Leader.

The incumbent has frequent contact with the District Bureaus of Operations and Implementation, as well as virtually every section within Project Development. Coordination outside the Department is with outside agencies and property owners.

The effectiveness of this position is measured by the quality and timeliness of corridor, design, and combined reports, and the completion of contract plans and specifications by prescribed letting dates.

# **Principal Accountabilities**

- 1. Prepares the engineering sections for corridor, design and combined location studies in an accurate and timely manner.
- 2. Prepares and recommends alternative designs for location studies.
- 3. Assists with information meetings, public hearings, and presentations to describe projects.
- 4. Ensures plans prepared are accurate, complete, and in compliance with design standards and specifications, and depict the most cost efficient design.
- 5. Coordinates the activities of other sections within the Bureau to ensure plans are completed in time to meet prescribed letting dates.
- 6. Performs duties in compliance with departmental safety rules. Performs all duties in a manner conducive to the fair and equitable treatment of all employees.
- 7. Performs other duties as assigned.